

Sub D<sub>a</sub> }  
A-4  
(s<sup>1</sup>d)  
29. (New) An image processing device in accordance with claim 28, wherein said state of said image data determined by said state decision controller for each frame thereof is a frame size.

30. (New) An image processing device in accordance with claim 29, wherein said plurality of modes of operation include at least one of economy print mode, two-side print mode, and staple print mode.

---

REMARKS

The indication by the Examiner that claims 14-16 and 24-26 would be allowable if rewritten in independent form, including all of the limitations of the base claim and any intervening claims, is acknowledged with appreciation.

In order to minimize additional fees that would be due based on an added number of independent claims, claims 14-16 and 24-26 have not been rewritten in independent form at this time because claims 13 and 23 (from which they depend) have been amended in order to traverse the rejections thereof.

The acknowledgment by the Examiner of the receipt of the certified copy of the priority document is noted with appreciation.

The indication in the Notice of Draftsperson's Patent Drawing Review that the Draftsperson has objections to the drawings due to margins that are not

Serial No. 08/941,459

acceptable is noted. With the Examiner's concurrence, Applicant proposes to submit revised formal drawings once a Notice of Allowance is received.

In addition, prints of Figures 1-4, have been modified to correct minor errors. Accordingly, a Request for Approval of Drawing Changes is being filed concurrently herewith. It is respectfully requested that the Examiner approve the proposed drawing changes so that revised formal drawings can be prepared and submitted.

a. Election / Restriction

The present office action requires a restriction to one of the following inventions:

- I. Claims 1-3, 7-12, and 17-22, drawn to a display control unit; and
- II. Claims 4-6, 13-16 and 23-26, drawn to a print prevention control unit.

Pursuant to the restriction requirement, and consistent with the provisional election made by telephone on January 7, 1999, Applicant elects the invention of class II--Claims 4-6, 13-16 and 23-26, drawn to a print prevention control unit, with traverse.

Applicant respectfully traverses the restriction requirement and, based upon the following, request reconsideration.

Serial No. 08/941,459

In regard to "Combination and Subcombination or Element," the MPEP provides in part:

**A combination is an organization of which a subcombination or element is a part.**

Relative to questions of restriction where a combination is alleged, the claim thereto must be assumed to be allowable (novel and unobvious) as pointed out in MPEP 806.02, in the absence of a holding by the examiner to the contrary. When a claim is found in a patent, it has already been found by the Office to be allowable and must be treated on that basis.

MPEP 806.05(a), July 1998. [Emphasis added]

In the present case, the Office Action states that the inventions of I and II are distinct and related as combination and subcombination. However, according to the definitions of combination and subcombination above, it appears that the relationship of combination and subcombination does not apply. Specifically, the display controller of claim 1 (Group I) neither includes nor is included in the selection prohibiting controller of claim 4 (Group II). In order for there to be a combination and subcombination relationship, the "subcombination" must be part of the "combination." Absent a showing that a subcombination is part of a combination, Applicant respectfully requests that the restriction requirement be withdrawn.

In addition, it is noted that the MPEP provides:

If the search and examination of an entire application can be made without serious burden, the examiner must examine it on the merits, even though it includes claims to distinct or independent inventions. MPEP 803, July 1998.

Serial No. 08/941,459

In the present case, it appears that most of the cited references provide background information needed to examine claims directed to both claim groups. Thus, as the same or similar art would be needed to examine both groups, Applicant respectfully submits that no serious burden would be required to examine both sets of claims.

Accordingly, Applicant respectfully requests reconsideration in regard to the restriction requirement and withdrawal thereof.

**b. Application Summary**

Claims 1-26 are pending in the present Application. The status of the claims is as follows:

Claims 1-3, 7-12, and 17-22 are presently NOT under consideration as being directed to a non-elected invention under the present restriction requirement and claims 4-6, 13-16 and 23-26 ARE presently under consideration as being directed to the elected invention;

Claims 14-16 and 24-26 presently stand as objected to as being dependent upon a rejected base claim but are indicated as being allowable if rewritten in independent form;

Claims 4, 13, and 23 presently stand rejected under 35 U.S.C. §103(a) as being obvious over Tsutsumi et al, U.S. Patent 5,012,280 (hereinafter "Tsutsumi"), in view of Mori et al, U.S. Patent 4,918,537 (hereinafter "Mori");

Claims 5 and 6 presently stand rejected under 35 U.S.C. §103(a) as being obvious over Tsutsumi in view

Serial No. 08/941,459

of Mori, further in view of Ishiguro et al, U.S. Patent 5,053,831 (hereinafter "Ishiguro").

By this Amendment, the specification has been amended to correct minor errors and to improve the form thereof, as requested by the Examiner. Claims 4-6, 13-16, and 23-26 have been amended to more particularly point out and distinctly claim the invention. Claims 27-30 have been added in order to provide a more adequate basis for protection of the invention.

c. Section 103 Rejection(s)

i. Claims 4, 13, and 23

The rejection of claims 4, 13, and 23 under 35 U.S.C. § 103(a) as having been obvious, to one of ordinary skill in the art at the time of the invention, from Tsutsumi et al, U.S. Patent 5,012,280 (hereinafter "Tsutsumi"), in view of Mori et al, U.S. Patent 4,918,537 (hereinafter "Mori"), is respectfully traversed for the reasons set forth below.

The acknowledgment in the rejection that Mori does not disclose "a selection prohibiting controller prohibiting selecting an inoperable mode of operation of plurality of modes of operation through operation panel according to the state of image data" is acknowledged with appreciation.

As noted in the present specification, the present invention is intended to provide a user-friendly image processing device wherein when a mode of operation is not operable, based on the characteristics of the

Serial No. 08/941,459

images to be processed, the user will not select a non-operable mode.

One aspect of the present invention is highlighted in claim 4 which, as amended, recites:

An image processing device operable in a plurality of modes of operation, comprising:  
a memory for storing image data of a plurality of frames;  
a state decision controller for determining a state of said image data stored in said memory for each frame;  
an operation panel for selecting any of said plurality of modes of operation; and  
a selection prohibiting controller for automatically prohibiting selecting an inoperable mode of operation of said plurality of modes of operation through said operation panel **based on the thus determined state of said image data.**

[Emphasis added]

Thus, claim 4 recites that a state decision controller determines a state of the image data and that a selection prohibiting controller automatically prohibit an inoperable mode based on the state of the image data determined by the state decision controller.

As the present Office Action points out, Mori does not disclose, suggest or teach a selection prohibiting controller.

As the following will show, Tsutsumi also fails to disclose suggest or teach a selection prohibiting controller in accordance with the limitations of claim 4.

Serial No. 08/941,459

Tsutsumi discloses a copier which includes a touch panel display which displays functions available to be used. Some of these functions, however, may be manually blocked. As Tsutsumi describes an operator or service person of the copier can:

**"designate a function relating to a functional unit which is in trouble or which is not to be used so that the designated function is deleted from the display panel and made inoperative by prohibiting input to the unit, which makes it possible to use the copying apparatus having a functional unit in trouble or not to be used without misusing the unit by any unspecified person.**

Also, the operating panel becomes more convenient to manipulate by deleting display of the function which is to be inoperative from the panel.

When the **defective function unit is repaired** or the designated function is required to be used, the designation of the function is cancelled [sic] so that it becomes possible to use the function unit again."

Tsutsumi et al, column 2, lines 25-32. [Emphasis added]

Thus, as illustrated by the above quoted section, Tsutsumi discloses an apparatus where an operator can select a function to be disabled which remains effective until this choice is canceled. Furthermore, the functions which are enabled or disabled are, according to the examples provided, either functions which are broken (i.e., in trouble) or which are not to be used.

In contrast to the above, the present invention is directed to a device which (1) detects a state of the image data to be processed and (2) based on the

Serial No. 08/941,459

detected state of the image data, automatically disables modes which are not operative given the state of the image data.

Thus, the present invention claims an interaction between the images to be processed and the modes which are made available, whereas neither Mori nor Tsutsumi disclose, suggest or teach the limitation of setting inoperative modes based on the detected state of the image data to be processed.

Additionally, the present invention is directed to, and expressly claims, an automatic implementation of mode disabling based on the detected state of the image data to be processed. Tsutsumi, in contrast, discloses a manual process whereby an operator sets a function to be blocked. Tsutsumi do not disclose or suggest an automatic approach to function blocking, much less the elements needed to achieve this capability.

In order to render claim 4 obvious, Mori and Tsutsumi, either singularly or in combination, must suggest every limitation of the present claim. This they cannot do.

As pointed out above, Mori is wholly silent on the concept of, or apparatus for, selectively prohibiting specified modes in the apparatus. Tsutsumi, while disclosing a manual approach where an operator can block a function, does not disclose or suggest an automatic approach to function blocking, much less detecting a state the image to be processed and, based



Serial No. 08/941,459

on the detected state, automatically prohibiting a mode.

Claim 4 is representative of claims 4, 13 and 23. Each of these claims includes the limitations that a state of the images is detected, and that based on the detected state, the selection prohibiting controller automatically prohibits the selection of an inoperative mode.

Accordingly, as the cited references fail to disclose or suggest the above-mentioned limitations of the present invention, it is respectfully requested that the rejection of claims 4, 13, and 23 under 35 U.S.C. §103, as having been obvious, to one of ordinary skill in the art at the time of the invention, from Tsutsumi et al, U.S. Patent 5,012,280, in view of Mori et al, U.S. Patent 4,918,537, be reconsidered and withdrawn.

ii. Claims 5 and 6

The rejection of claims 5 and 6 under 35 U.S.C. § 103(a) as having been obvious, to one of ordinary skill in the art at the time of the invention, from Tsutsumi in view of Mori, further in view of Ishiguro et al, U.S. Patent 5,053,831 (hereinafer "Ishiguro") respectfully traversed for the reasons set forth below.

Claims 5 and 6 depend from claim 4. The nonobviousness of claim 4 over Tsutsumi and Mori are discussed above. The addition of the Ishiguro reference cannot overcome the inadequacy of Tsutsumi and Mori to render obvious claim 4.

Serial No. 08/941,459

Ishiguro discloses an image forming apparatus which includes document size sensors by which the length and width of a document in the automatic document feeder can be detected.

While Ishiguro discloses detecting a length and width of a document, Ishiguro does not disclose determining which of a plurality of operating modes are inoperative based on the detected document condition, much less provide for automatically disabling inoperative modes based on the detected document conditions. Absent a disclosure by Ishiguro of the limitations of the present claim, Ishiguro, together with Tsutsumi and Mori, do not disclose every limitation of the claimed invention of claim 4

Claims 5 and 6 depend from claim 4. As claim 4 is considered to be nonobvious over the cited references for the above described reasons, claims 5 and 6 which depend therefrom are also considered to be nonobvious for at least the reason of depending from claim 4.

Accordingly, it is respectfully requested that the rejection of claims 5 and 6 under 35 U.S.C. §103, as having been obvious, to one of ordinary skill in the art at the time of the invention, from Tsutsumi et al in view of Mori et al, further in view of Ishiguro et al, U.S. Patent 5,053,831, be reconsidered and withdrawn.

Serial No. 08/941,459

d. Newly Added Claims 27-30

New claim 27 depends from claim 4. Claim 27 adds the limitation of a display for displaying an operating state of the image processing device and a display prohibiting controller which is responsive to the selection of an operable mode of operation of said plurality of modes of operation. In other words, when the selection prohibiting controller determines that certain modes should be prohibited based on the image characteristics--and thus blocks these modes from being invoked--the display further displays the modes which are not prohibited. These limitations find support in the present specification and are consistent with the limitations of original claim 1.

New claim 28 is independent and new claims 29 and 30 depend therefrom. New claim 28 is of similar scope to the other independent claims and employs alternative language to make clear that the selection prohibiting controller operates responsive to the state decision of any of the plurality of modes of operation, for selecting responsive to the selection prohibiting controller.

New claim 29 expressly claims that the state of the image detected is a frame size and new claim 30 expressly claims specific modes which may be included in the plurality of modes of operation.

In view of the foregoing Amendments and remarks, this Application is considered to be in condition for

Serial No. 08/941,459

allowance and reconsideration and a notice of allowance is respectfully requested.

This Amendment results in an increase in the number of independent claims from six to seven, while the total number of claims increases from twenty-six to thirty. Accordingly, a check in the amount of \$150.00 for the 37 CFR 1.16(b) fee for the one additional independent claim and four additional claims in excess of twenty is submitted herewith.

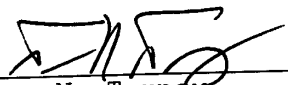
If an extension of time is required to enable this document to be timely filed and there is no separate Request for Extension of Time filed herewith, this document is to be construed as also constituting a Request for Extension of Time under 37 C.F.R. § 1.136(a) for a period of time sufficient to enable this document to be timely filed. Any fee required for such Request for Extension of Time and any other fee required by this document pursuant to 37 C.F.R. §§ 1.16 and 1.17, other than issue fee, and not submitted herewith should be charged to deposit account No. 18-

Serial No. 08/941,459

1260. Any refund should be credited to the same  
account.

Respectfully submitted,

By:

  
\_\_\_\_\_  
Thomas N. Tarnay  
Reg. No. 41,341  
Attorney for Applicant

April 26, 1999

SIDLEY & AUSTIN  
717 North Harwood  
Suite 3400  
Dallas, Texas 75201  
Direct: (214) 981-3388  
Main: (214) 981-3300

TNT/llg

Serial No. 08/941,459